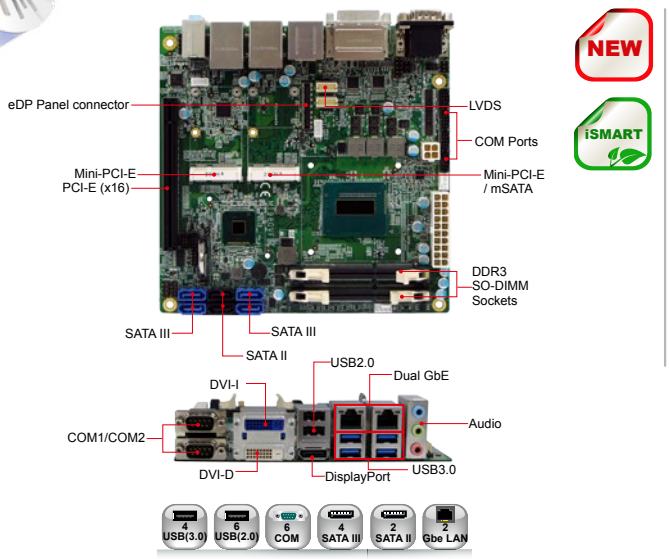
MI980

4th Generation Intel® Core™ i7/i5/i3/Celeron® Mini-ITX Motherboard w/ Intel® QM87 PCH

4th Generation Intel® Core™ i7/i5/i3-Based



NEW

iSMART

Features

- Onboard 4th Generation Intel® Core™ i7/i5/i3 / Celeron® QC / DC processors
- 2x DDR3/DDR3L SO-DIMM, Max. 16GB
- Integrated VGA, supports DVI-I/ DVI-D/ LVDS or eDP/ DisplayPort
- 2x Intel® PCI-E Gigabit LAN
- Watchdog timer, Digital I/O, iAMT (9.0), vPro, iSMART
- 6x USB 2.0, 4x USB 3.0, 6x COM, 4x SATA III, 2x SATA II
- 1x PCI-E(x16), 2x Mini PCI-E(x1)

System

CPU Type	BGA1364 for 4th generation Intel® mobile Core™ i7/i5 /i3/ Celeron® QC/ DC processors
System Memory	2x DDR3/DDR3L SO-DIMM, Max. 16GB (Non-ECC)
System Chipset	MI980VF Series:Intel® QM87 PCH MI980F: Intel® HM86 PCH
BIOS	AMI
Watchdog Timer	256 levels
SSD	1x mSATA via Mini PCI-E (Thru SATA III)
H/W Monitor	Yes
Expansion Slot	1x PCI-E(x16), 2x Mini PCI-E(x1)

Graphics

VGA Controller	4th Generation Intel® Core™ i7/i5/i3 / Celeron® integrated Gfx, supports CRT, DVI, DisplayPort, LVDS / eDP
VGA Memory	Max. Shared memory – 1024MB
Display Interface	Supports 24-bit dual channel LVDS/eDP, DVI-I, DVI-D, DisplayPort

LAN

Controller	MI980VF Series: Intel® I217LM Gigabit LAN PHY MI980F: Intel® I217V Gigabit LAN PHY Intel® I211AT PCI-E Gigabit LAN (as 2nd LAN)
Connector	2x RJ-45 on board

Multi I/O

I/O Chipset	Fintek F81866AD-I 1x RS-232/422/485 (jumperless selection) 5x RS232 MI980VF Series: 4x SATA III, 2x SATA II MI980F: 2x SATA III, 2x SATA II
USB	2 ports on board, 4 ports via pin-header (USB 2.0) 4 ports on board (USB 3.0)
Audio	Intel® QM87 / HM86 PCH built-in HD audio controller + ALC892 w/ 7.1 channels
Others	Digital I/O (4-in/4-out), ATX power connector, iSMART support

Mechanical and Environmental

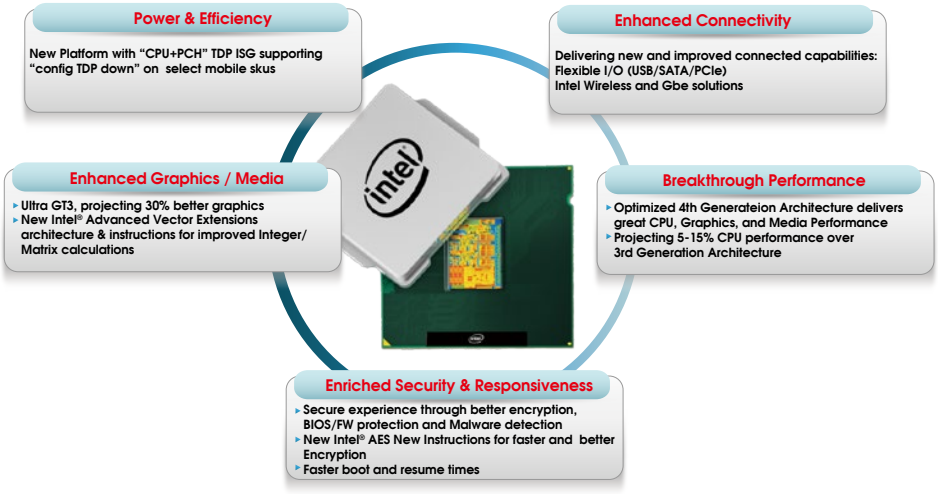
Dimensions	170mm x 170mm (6.7" x 6.7")
Max. Power Requirement	Intel® Core™ i5-4402E 1.60 GHz w/ 2x 2GB DDR3-1333 +3.3V: 0.29 A +5V: 0.73 A +5Vsb: 1.70 A +12V: 2.01 A
Operating Temperature	0°C~60°C (32°F~140°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	10%~90% (non-condensing)

Ordering Information

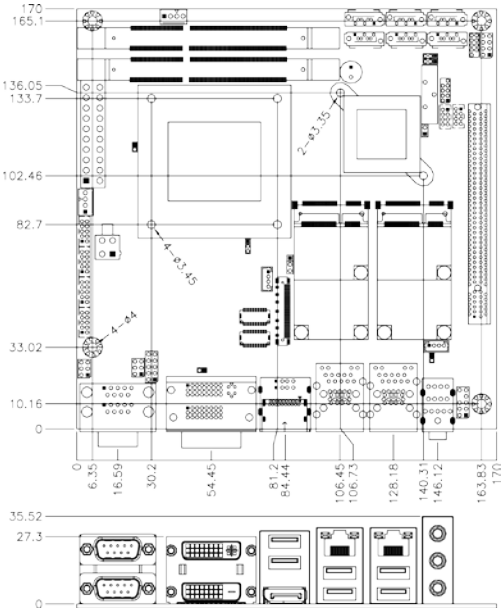
MI980VF-4700EQ	Intel® QM87/Core i7-4700EQ (2.4GHz) Mini-ITX motherboard w/ DVI-I, DVI-D, DisplayPort, LVDS, dual Gigabit LAN, iAMT 9.0, RAID, TPM 1.2, vPro, iSMART, CPU cooler onboard
MI980VF-4400E	Intel® QM87/Core i5-4400E (2.7GHz) Mini-ITX motherboardd w/ DVI-I, DVI-D, DisplayPort, LVDS, dual Gigabit LAN, iAMT 9.0, RAID, TPM 1.2, vPro, iSMART, CPU cooler onboard
MI980F-4100E	Intel® HM86 /Core i3-4100E (2.4GHz) Mini-ITX motherboard w/ DVI-I, DVI-D, DisplayPort, LVDS, dual Gigabit LAN, EuP/ErP compliant, iSMART, CPU cooler onboard

Remarks: 1. Specifications are subject to change without prior notice.
2. ODM/OEM is available.

CPU


Power & Efficiency
New Platform with "CPU+PCH" TDP ISG supporting "config TDP down" on select mobile skus
Enhanced Connectivity
Delivering new and improved connected capabilities:
Flexible I/O (USB/SATA/PCIe)
Intel Wireless and Gbe solutions
Enhanced Graphics / Media
Ultra GT3, projecting 30% better graphics
New Intel® Advanced Vector Extensions architecture & instructions for improved Integer/ Matrix calculations
Breakthrough Performance
Optimized 4th Generateion Architecture delivers great CPU, Graphics, and Media Performance
Projecting 5-15% CPU performance over 3rd Generation Architecture
Enriched Security & Responsiveness
Secure experience through better encryption, BIOS/FW protection and Malware detection
New Intel® AES New Instructions for faster and better Encryption
Faster boot and resume times

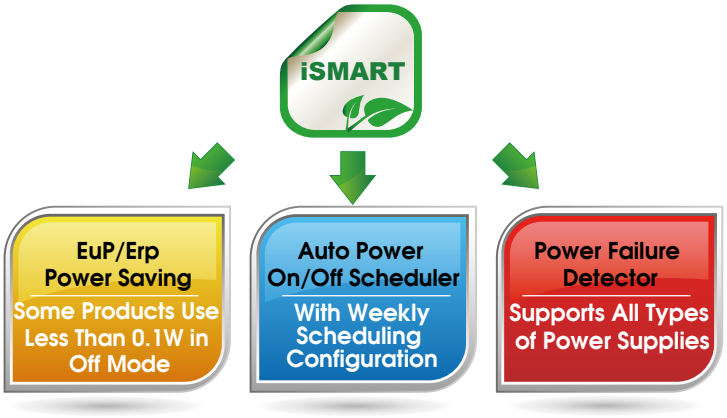
Dimensions



Cooler

Onboard CPU Cooler
1. Dimensions : 60mm x 60mm x 27mm (L x W x H)
2. 4-Wired Cable (Supports PWM mode)
3. Material : Aluminum
4. Fan Speed : 6500 R.P.M.

iSMART Technology


iSMART
EuP/Erp Power Saving
Some Products Use Less Than 0.1W in Off Mode
Auto Power On/Off Scheduler
With Weekly Scheduling Configuration
Power Failure Detector
Supports All Types of Power Supplies

BIOS